

REMARKS

Claims 1-7, 9, 10, 13, 15, 17-19, and 21-25 are pending. Reconsideration and allowance of the pending claims in view of the following remarks are respectfully requested.

In the Office Action dated February 24, 2006, claims 13, 15, 17-19, and 21-25 were rejected under 35 U.S.C. § 102(e) as being anticipated by Ahmad (U.S. Patent Application Publication No. 2003/0190012). Applicants respectfully traverse this rejection.

Independent claim 13 recites a lithographic apparatus that includes, *inter alia*, “a particle generator that generates additional particles for interacting with debris particles, wherein said particle generator comprises an outlet and a pump.” Ahmad does not disclose or suggest all of the features of claim 13.

As discussed by Ahmad, debris particles, in the form of neutral and charged particles, are generated from radiation-emitting plasma that is generated in EUV radiation sources. *See* Ahmad at [0007]. Ahmad teaches the use of a pair of electrodes (2) for generating an electric field, and a gas sink in the form of a vacuum unit (4) to deflect the debris particles that are generated in the plasma (12) and remove the particles from the apparatus. *See* Ahmad at [0031] – [0034]. Ahmad does not disclose or suggest a particle generator that generates additional particles for interacting with the debris particles, as recited by claim 13.

Accordingly, Applicants respectfully submit that claim 13 and that claims that depend from claim 13 are patentable over Ahmad, and respectfully request that the rejection to claims 13, 15, 17-19, and 21 be withdrawn.

Independent claim 22 recites a lithographic apparatus that includes, *inter alia*, a debris-mitigation system that is configured to provide additional particles for interacting with the debris particles, and comprises a plasma generator configured to provide ionized particles. Ahmad does not disclose or suggest all of the features of claim 22.

Ahmad is discussed above. Because Ahmad does not disclose or suggest a debris-mitigation system that is configured to provide additional particles for interacting with the debris particles, Applicants respectfully submit that claim 22 is patentable over Ahmad. Moreover, Ahmad does not disclose or suggest that a debris-mitigation system that includes a plasma generator configured to provide ionized particles, as recited by claim 22.

Accordingly, Applicants respectfully submit that claim 22 and claim 23, which depends from claim 22, are patentable over Ahmad, and respectfully request that the rejection to claims 22 and 23 be withdrawn.

Independent claim 24 recites a lithographic apparatus that includes, *inter alia*, a debris-mitigation system that is configured to provide a supersonic flow of additional particles for interacting with the debris particles. Ahmad does not disclose or suggest all of the features of claim 24.

Ahmad is discussed above. Ahmad does not disclose or suggest generating additional particles for interacting with the debris particles, let alone a debris-mitigation system that is configured to provide a supersonic flow of additional particles.

Accordingly, Applicants respectfully submit that claim 24 is patentable over Ahmad, and respectfully request that rejection to claim 24 be withdrawn.

Independent claim 25 recites a lithographic apparatus that includes, *inter alia*, a particle generator that generates additional particles for interacting with debris particles, wherein the particle generator comprises a plurality of electrodes. Ahmad does not disclose or suggest all of the features of claim 25.

Ahmad is discussed above. Ahmad simply does not disclose or suggest a particle generator that generates additional particles to interact with the debris particles. The only particles disclosed by Ahmad are the debris particles themselves.

Accordingly, Applicants respectfully submit that claim 25 is patentable over Ahmad, and respectfully request that the rejection to claim 25 be withdrawn.

Applicants acknowledge with appreciation that claims 1-7, 9, and 10 are allowed. However, in view of the foregoing remarks, Applicants respectfully submit all of the pending claims are allowable.

All rejections having been addressed, it is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited. If any point remains in issue which the Examiner feels may be best resolved through a personal or telephone interview, please contact the undersigned at the telephone number listed below.

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Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

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